Abstract

Novel multifunctional cytokines

The present invention relates to a novel fusion protein with the formula X-Y, or Y-X, wherein X represents a first immunoregulating polypeptide and Y represents a second immunoregulating polypeptide different from X. The present invention also relates to a nucleic acid molecule encoding such a fusion protein and a vector comprising such a nucleic acid molecule. The present invention also provides infectious viral particles and host cells comprising such a nucleic acid molecule or such a vector as well as a process for producing such infectious viral particles. The present invention also relates to a method for recombinantly producing such a fusion protein. Finally, the present invention also provides a pharmaceutical composition comprising such a fusion protein, a nucleic acid molecule, a vector, infectious viral particles and a host cell as well as the therapeutic use thereof.